Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A lens array for use in focusing light between a set of photoactive components and a set of optical fibers, comprising:

a plurality of asymmetric biconvex lenses formed as a part of a common platform, wherein each lens of the plurality of asymmetric biconvex lenses ~~which~~ are:

a) collinearly and contiguously positioned in a lateral direction, and

b) truncated in said lateral direction so that ~~the~~ each lens of the plurality of asymmetric biconvex lenses ~~have~~ has an extended boundary between adjacent lenses of the plurality of asymmetric biconvex lenses, and each lens of the plurality of asymmetric biconvex lenses having a width and a height, and wherein the height is approximately 1.5 times greater than the width, and wherein ~~them and have greater height than width~~

said common platform includes a set of alignment pins precisely aligned with said plurality of asymemetric biconvex lenses for mating with alignment holes in a ferrule supporting said set of optical fibers, and wherein

said platform and said plurality of asymmetric biconvex lenses comprise molded plastic.

Claims 2-4 (canceled)

Claim 5 (currently amended): An assembly for use in optical communications, comprising:

a) an optical ferrule for supporting a set of optical fibers disposed in a linear array;

b) an optical transmitter subassembly for transmitting photonic signals to said set of optical fibers including a set of semiconductor lasers disposed in a linear array; and

c) a lens platform including a set of optical lenses, and wherein each lens of the set of optical lenses has a height and a width, and wherein the height is approximately 1.5 times the width, and wherein and each lens of the set of optical lenses having ~~greater height than width and~~ extended common boundaries which are contiguously positioned in a linear array corresponding to said set of optical fibers and said set of semiconductor lasers, and wherein

said lens platform includes a set of alignment pins precisely aligned with said set of optical lenses for mating with alignment holes in said optical ferrule, and wherein

said lens platform and said set of optical lenses comprise molded plastic.

Claims 6-8 (canceled)

Claim 9 (currently amended): An assembly for use in optical communications, comprising:

a) an optical ferrule for supporting a set of optical fibers disposed in a linear array;

b) ~~a~~ an optical receiver subassembly for receiving photonic signals from said set of optical fibers including a set of semiconductor PIN diodes disposed in a linear array; and

c) a lens platform including a set of optical lenses, and wherein each lens of the set of optical lenses has a height and a width, and wherein the height is approximately 1.5 times the width, and wherein and each lens of the set of optical lenses having ~~greater height than width and~~ extended common boundaries which are contiguously positioned in a linear array corresponding to said set of optical fibers and said set of semiconductor PIN diodes, and wherein

said lens platform includes a set of alignment pins precisely aligned with said set of optical lenses for mating with alignment holes in said optical ferrule, and wherein

said lens platform and said set of optical lenses comprise molded plastic.

Claims 10-16 (canceled)

Claim 17 (currently amended): A lens and alignment frame for use in optically and mechanically interfacing and integrated circuit chip having a set of photoactive components which is attached to a carrier assembly with a set of optical fibers supported in a ferrule having a set of alignment holes precisely positioned with respect to said set of optical fibers, said lens and alignment frame including:

a planar base adapted for being mounted on said carrier assembly;

an array of collinear lenses each of which have greater height than lateral width mounted for focusing light between said ~~array~~ set of optical fibers and said ~~array~~ set of photoactive components; ~~and~~

a set of guide pins projecting forward of said planar base for mating with said alignment holes in said ferrule in order to position said ferrule and said set of optical fibers with respect to said lens and alignment frame, said carrier assembly and said integrated circuit chip; and

a tower structure on which said set of optical lenses and said set of guide pins are mounted, and wherein said tower structure includes a pair of elevated end sections on which said set of guide pins are mounted, and wherein

the height of each lens of the array of collinear lenses is approximately 1.5 times the width of each lens of the array of collinear lenses.

Claims 18-20 (canceled)

Claim 21 (new): An assembly for use in optical communications, the assembly comprising:

an optical ferrule having a plurality of optical fibers, a first alignment hole, and a second alignment hole, and wherein each optical fiber of the plurality of optical fibers has a polished end, each polished end of the plurality of optical fibers being aligned in a first linear array, the first alignment hole and the second alignment hole being collinear with each polished end of the plurality of optical fibers, the polished end of a first optical fiber of the plurality of optical fibers being separated from the polished end of a second optical fiber of the plurality of optical fibers by a first interval, and each polished end of the plurality of optical fibers being aligned relative to the first alignment hole and the second alignment hole, and wherein the first interval is

approximately equal to 250 microns, and wherein the plurality of optical fibers includes twelve optical fibers;

a plurality of photoactive components, each photoactive component of the plurality of photoactive components being aligned in a second linear array, a first photoactive component of the plurality of photoactive components being separated from a second photoactive component of the plurality of photoactive components by a second interval, and wherein the second interval is substantially equal to the first interval;

a lens and alignment frame having a base, a tower, a first alignment pin, a second alignment pin, and a plurality of lenses, and wherein the tower projects away from the base, and wherein the first alignment pin projects away from the tower, and the second alignment pin projects away from the tower, and each lens of the plurality of lenses being aligned in a third linear array, each lens of the plurality of lenses has a respective front lens element and a respective rear lens element, a first lens of the plurality of lenses being separated from a second lens of the plurality of lenses by a third interval, and wherein the third interval is substantially equal to the first interval, and each lens of the plurality of lenses being a respective asymmetric biconvex lens, each lens of the plurality of lenses being truncated in a lateral direction so as to have a height dimension and a width dimension, and wherein the height dimension is approximately 1.5 times the width dimension, and a boundary between the first lens and the second lens being contiguous, and wherein the lens and alignment frame is made of a plastic material, and wherein

the plurality of photoactive components is mounted on the lens and alignment frame so that each photoactive component is aligned with the first alignment pin and the second alignment

pin, and the respective rear lens element of each lens of the plurality of lenses faces the plurality of photoactive components, and wherein

when the optical ferrule is mated with the lens and alignment frame, the first alignment pin of the lens and alignment frame is introduced into the first alignment hole of the optical ferrule, and the second alignment pin of the lens and alignment frame is introduced into the second alignment hole of the optical ferrule, and the plurality of lenses is positioned between the plurality of photoactive components and the plurality of optical fibers so that the respective front lens element of each lens of the plurality of lenses faces the plurality of optical fibers and so that the plurality of photoactive components are in optical communication with the plurality of optical fibers via the plurality of lenses.